SPINAL CORD

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New Faces in the ASCC West Memphis Office

Sharon McCoy has assumed the duties of Case Manager in the ASCC West Memphis office. She is a native West Memphian who has recently returned home. Prior to assuming her role as ASCC Case Manager, Sharon was employed as a Counselor for the Seven Hawks Wilderness program in Waverly, TN.

Sharon received her degree in Psychology from Memphis State University. She also holds instructor certifications in Community First Aid, HIV/AIDS Education and Crisis Intervention Techniques. Her enthusiasm and positive attitude are qualities soon to be shared with the individuals in West Memphis and the surrounding areas.

Rose Jones has joined Sharon in the West Memphis office and will be providing the secretarial support. Her associate degree in Office Administration and her expertise with computers are welcome assets to the agency. Rose has quickly adapted to the busy office environment and provides a warm welcome to anyone requesting assistance.

The ASCC staff extends a hearty welcome to both Sharon and Rose!



Sharon McCoy, ASCC Case Manager (left), and Rose Jones, Secretary (right), of the West Memphis office.

Arkansas Paralympian Wins Bronze

Rollin' Razorback member Tim Kazee was one of twelve chosen to play on the USA Wheelchair Basketball Team at the Paralympics in Atlanta. In the opening game of the medal round, previously unbeaten USA was upset by Australia, who went on to win the Gold medal. Team USA rebounded by defeating Spain, to capture the Bronze medal and finish with a 8-1 record.

Congratulations! Tim and Team USA.

Secondary Conditions Survey Results Are Here!

Two years ago ASCC began conducting a broad study of the secondary conditions experienced by Arkansans with spinal cord injury (SCI). These secondary conditions involve the physical and psychosocial complications that follow the initial injury. Realizing that little information was available regarding the effects of these secondary conditions on an individual's life and ability to function, ASCC decided to answer this question among its Arkansas population.

In 1995, ASCC Case Managers surveyed 650 of their clients

with SCI to identify secondary conditions. These 650 clients were over the age of 18 and were at least one year postinjury: 80 percent were male and 20 percent female; 77 percent were white and 23 percent were nonwhite. The interviews took place over a six month period, primarily in the clients' homes.

Efforts this year have focused on the analysis of the data to determine the prevalence of these conditions. As a result, the final report, *Identifying Secondary Conditions in Arkansans with*

(Continued on page 7 - see "Secondary Conditions Survey Results")

SPINAL COURIER

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Cheryl L. Vines Executive Director

Thomas L. Farley Dee Ledbetter Co-Editors

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BUCKLE UP!

ASCC Van Giveaway

Mare Dykes, a 29 year old employee at the Jacksonville Air Base, was thrilled when she received a call from ASCC Executive Director Cheryl Vines, informing her she had been chosen to receive a van with a lift. The van had been donated to the Commission by the estate of former ASCC client John Honea. who died earlier this year. In his will Mr. Honea, who had a spinal cord injury himself, requested that the Commission provide the van to a needy client. Members of the Commission, in a special meeting, selected Ms. Dykes of Beebe to receive the van.

Mare, who is paraplegic as a result of complications at birth, has been in a wheelchair most of her life. For several years her husband has dropped her off at work on his way to his job. In the evening, she has to wait for him to get off work and come back to pick her up. This wasn't so bad at first, she admitted, but things

SPINAL COURIER Letters

Questions • Suggestions • Directions • Answers

Flu Vaccination

Dear Editor:

I wanted to take a minute to remind the *Spinal Courier* readers to get their flu vaccine for this year. It is best to get your annual flu injection in October or November. I recommend you contact your physician or your local health department.

Shirley McCluer, M.D. ASCC Medical Director Little Rock, AR

Wheelchair Maintenance Training

Dear Editor:

The Arkansas Spinal Cord Commission (ASCC) will be Maintenance Training session Saturday, October 26th. The training, for ASCC clients and their family members, will begin at 10:00 a.m. in the Physical and Occupational Gym at Baptist Rehabilitation Institute, located off I-630 in Little Rock.

having a free Wheelchair

Preventive maintenance, fixing problems and making adjustments will be some of the topics addressed during the training. This session will cover manual wheelchairs only.

If you would like to attend or more information, please call me at (501) 296-1784 or (800) 459-1517.

John Gould
VISTA / ASCC Peer Support
Counselor
Little Rock, AR

changed in November 1994, when their son Stephen was born.

A young mother does not like to be away from her baby, but it was necessary for Mare to return to work. The hours away from him, especially the last 30 minutes of waiting for her ride, seemed endless. There was an additional concern that she might need to take her son to the doctor some night or weekend when her husband was working. She had no way to handle such emergencies. Also, it was frustrating for Mare, a very independent person, to have to wait for someone to take her to get groceries.

Mare and her husband, Darin, were delighted to learn that they would now have transportation and Stephen's time at day care could be shortened. One of the considerations for the Commission

was the upkeep of the van. Since it was an older van and subject to the usual maintenance and upkeep problems, it was felt that Darin would be able to take care of it in order to get the most use from it.

"It is very unusual for the Spinal Cord Commission to have the opportunity to provide one of our clients with transportation," said Commission Chairperson Sheila Galbraith Bronfman. "There are so many needs and we wish we had more vans to give away."



HIGH PROFILE!

Rose Trosper

This is the thirteenth in a series of articles profiling the ASCC Case Managers.

Rose Trosper has been an integral part of the Commission since 1989. Upon completion of her degree in Psychology at AR State University in December 1995, she assumed the duties of Case Manager in the Jonesboro ASCC office. Rose has also served as an ASCC Grievance Officer since 1991.

For the past four years, Rose has served on the Planning Committee for the annual "Reach for a Star" program. This awards reception/ceremony is held in conjunction with National Rehabilitation Week, and honors individuals with disabilities who have made significant contributions in the community. She is also currently serving on a local community ADA Roundtable Committee.

In September of this year, Rose made a presentation to the American Association of Spinal Cord Injury Psychologists and Social Workers on "Maintaining a Ventilator Tetraplegic in a Rural Community Setting." The presentation was well received and has been selected for publication in the Association's SCI Psychosocial Process, which is printed quarterly.

Rose has spent the past year getting to know the 140 individuals with spinal cord disabilities on her caseload in seven counties of Northeast Arkansas. She has developed the tenacity needed to ensure that the individuals on her caseload receive quality services, and she is readily

available to provide assistance. Rose's clients in Northeast Arkansas have quickly learned that she is a person to be counted on, no matter how great or small the need.



FAMILY MEMBERS: My husband, Larry; two children, Jessy, age 16, and Cody, age 13; and my attack Siamese cat, Sophie.

PHRASE THAT BEST DESCRIBES ME: Honest, friendly and a huge capacity to care about people.

FAVORITE WAY(S) TO UNWIND: I love music and have a vast collection of almost every kind. I unwind by putting on a CD and sipping a good cup of coffee.

HIDDEN TALENTS/HOBBIES: I guess my hidden talent would be my ability to write poetry. I use this talent to work through problems and keep it pretty private. My hobbies are collecting old books and old coins.

ACCOMPLISHMENT I'M MOST PROUD OF: Besides my two children (who I am very proud of), I am proud of obtaining my degree in Psychology. That was a tough goal to achieve!

SOMETHING I'D CHANGE ABOUT MYSELF IF I COULD: To be able to trust people more (this has been a lifetime goal).

LAST GOOD BOOK I'VE READ: Jack and Jackie: A Biography of their Camelot Years. I really admire Jackie Kennedy Onassis.

MY DREAM VACATION WOULD BE: To spend time in England, exploring their countryside, castles and British culture.

MOST IMPORTANT THING I'VE LEARNED AS A CASE MANAGER: That we all, no matter what our disability or ability might be, need to persevere. Never let anyone put us down, damage our self-esteem or "pigeon hole" us. We are all special, unique and important human beings.

BEST ADVICE TO SOMEONE WITH A DISABILITY: Always remember you are the same person you were before your disability. You are valuable and have contributions to make to yourself, your family and to society. Be as positive as you can be and always take your health issues seriously by remaining the master of whatever lies in your future.

With Thanks

The Arkansas Spinal Cord Commission accepts tax deductible donations. The generosity of the many individuals and families who over the years have made memorial donations is greatly appreciated. Contributions are used to assist our clients through purchases of equipment and educational resources.

If you would like to make a contribution, please contact the Commission at (501) 296-1788 / (800) 459-1517 / tdd (501) 296-1794, or send your donation to:

AR Spinal Cord Commission 1501 N. University, Suite 470 Little Rock, AR 72207

Donations This Quarter From: Hot Springs Village Kiwanis Club

Tendon Transfer

Continued from page 5

cord level there are usually two of the three wrist extensors working. Commonly, we can take one of these muscles and use it to provide active finger flexion.

Additionally, if the wrist extensors are working (C6 level) we do not need to use the brachioradialis muscle to help extend the wrist. In this situation, we can use this muscle to provide active pinch by attaching it to the thumb. This gives active thumb flexion and side-pinch.

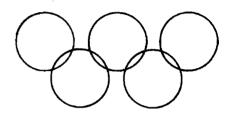
In summary, while these procedures can not restore normal function, they provide enough movement for independence with many activities of daily living. Any patients interested in finding out about possible reconstructive procedures should contact Dr. Gellman at UAMS Department of Orthopaedic Surgery, (501) 686-5590.

From the Director

Atlanta, August 1996: Oh, what a month it was! As many of you are aware, I had the opportunity to be part of the 1996 Paralympics in Atlanta this summer. It was a once in a lifetime opportunity for a wheelchair sports junkie like me and I enjoyed every minute of it.

I wish I could describe for you the feeling of being at the opening ceremonies, the same stadium where you watched the Olympics open a few weeks earlier, full once again for these ceremonies. Christopher Reeve, Carly Simon, Aretha Franklin, Liza Minelli, Vice President Gore - they were great, but the real stars were the athletes, all 2,100 of them as they paraded into the venue. I never felt more patriotic than watching the U.S. team come in.

But the real excitement of the night (make that morning, since it didn't happen 'til nearly 1:00 a.m.) was the lighting of the Paralympic Torch. It was the big mystery: How would it be done? USA wheelchair track star Scot Hollenbeck carried the



flame, which had traveled down the coast from Washington, DC, into the darkened stadium, flying around the track and passing it off to Tricia Zorn, the Paralympic gold medal winning swimmer who is blind. She carried it on around and passed it to amputee athlete Al Mead who *ran* the torch up the stairs to the *top* of the stadium and the base of the three story high torch tower. We were all holding our collective breath - now what?

Al handed the torch to Mark Wellman, the former Paralympic wheelchair athlete and outdoor enthusiast who scaled El Capitan in Yosemite a few years ago. Mark placed the torch in a special holder between his feet and began pulling himself up a rope, scaling the torch tower to the top. In the dark, we all watched and cheered as Mark and the torch moved slowly up the side of the tower in the moonlight. Finally, he reached the top, took the torch from between his feet and lit the Paralympic flame to open the first full Paralympics held in the United States. Wow! It was exceptional, a night I will never forget. And it just got better from there.

I could write pages and pages of my experiences in the wheelchair repair center, where we did over 3,000 repairs to keep the athletes rollin' and competing. Or, of seeing the events, held in all the same venues as the Olympics: fencing, swimming, table tennis, track and field. The last morning of the Games we walked a block from our apartment to Peachtree Road to watch the marathoners, cheering as each crested the hill and flew past us. Suffice to say, it was exciting.

Ben Vaughn and his parents, Randall and Teresa of Conway, were there to share the experience and, in the excitement of the Games, Ben assured me he will be competing in Sydney, Australia, at the 2000 Games. Any other takers? Hope I'm there to see him!

Cheryl L. Vines

Upper Extremity Tendon Transfer for Reconstruction in Cervical Spinal Cord Injury

Harris Gellman, M.D. Professor and Chief, Hand and Upper Extremity Service UAMS Department of Orthopaedic Surgery Guest Writer for ASCC Medical Director Column



Paralysis due to cervical spinal cord injury is probably one of the most devastating injuries that could happen. Quadriplegic patients have varying degrees of paralysis of the upper extremity with the majority of patients having a functional motor level of C6.

Quadriplegic patients are unable to extend their wrist, pinch or grasp. They are also unable to lift their arms or extend their elbows against gravity due to paralysis of the triceps muscle. This prevents these individuals from being able to feed themselves, pick up any objects, and from reaching overhead to get to objects on shelves.

One of the most significant advances in the treatment of the quadriplegic patient over recent years has been improved tendon transfer surgery. This surgery can restore some of the lost function to improve upper extremity function.

There are many procedures available. The best procedure is determined by which muscles are present and working. I will attempt to outline the most common procedures and their benefits based on functional spinal cord level.

Cervical Spinal Cord Level 5:

These patients usually have function of the biceps muscle, part of the deltoid muscle and part of the brachioradialis muscle working.

What does this mean? These patients can bend their elbows, but not turn their arms palm-down.

They usually can lift their upper arm away from their body at the shoulder level, but are unable to extend their wrists or straighten their elbows. The biggest problem here is the inability to turn the hand or arm over. When someone is stuck in palm-up position they have difficulty eating, brushing their teeth etc., because their hand and thumb are pointing away from their face.

The surgical procedures which I have found to be most helpful in these people are: Biceps rerouting, Deltoid transfer for triceps reconstruction and brachioradialis transfer for wrist extension.

Biceps Rerouting: The biceps muscle helps to flex (bend) the elbow. It also causes the forearm to turn palm-up. Where there are no muscles working to balance the arm, the hand stays palm-up and is unable to turn over. The "biceps rerouting" operation is actually a simple procedure whereby the muscle is detached from its normal insertion at the elbow and repositioned so that it will now turn the hand palm-down when it flexes the elbow. Patients find this a significantly helpful procedure since they can now feed themselves using a cuff to hold utensils.

Deltoid Transfer: The purpose of this operation is to help patients to extend or straighten the elbow. The deltoid is the muscle that allows the arm to be elevated away from the body. If this muscle is working normally, one-third of the muscle is attached to the triceps muscle at the elbow with a tendon graft. This procedure allows patients to

extend the elbow against gravity and hold the arm extended overhead against gravity without having the arm fall onto the head.

Brachioradialis Transfer: This is somewhat more complicated to explain. The brachioradialis muscle helps to bend the elbow. It attaches from the elbow to the wrist level. You can tell it is working because you can see the muscle "stand-up" across the side of the elbow when the elbow is bent against resistance. If this muscle is working, it can be transferred (moved) at its wrist attachment to assist in extending or lifting the wrist against gravity.

If wrist extension can be improved or replaced, sometimes we can give patients finger motion for grasp by "tying down" (tenodesing) the finger and thumb flexor tendons at the wrist. If this is done, when the wrist is extended the fingers will "automatically" close, giving grasp and pinch.

Cervical Spinal Cord Level 6:

Patients at this level have all of the above muscles working. In addition, the wrist extensor muscles are also working in patients at this level. This gives us more tendons to work with and more possible procedures to improve hand function. We usually can do all of the above surgeries for restoration of function, plus the following:

Normally, there are three wrist extensor muscles present to extend or lift the wrist against gravity. In patients at the sixth cervical spinal (Continued on page 4 - see "Tendon Transfer")

Women with Spinal Cord Injury Project Completed

Many of you are familiar with the survey that was recently completed of Arkansans with SCI regarding their experences with a variety of secondary conditions (see article on page 1). Initial analysis on the data from that survey has been completed and two reports written to the Centers for Disease Control and Prevention (CDC). One of the reports, Identifying Secondary Conditions in Women with Spinal Cord Injury, focused on comparisons between the male and female respondents on items covered in the questionnaire. This report concluded:

While medical conditions which are secondary to SCI are similar between the sexes, women frequently exhibit differing patterns in psychosocial areas. as well as non-medical situations. For example, one of the most substantial differences between female and male respondents is transportation usage and needs. Women with spinal cord injury are much less independent than men with regard to availability, accessibility, and use of transportation. They are also more likely than men to use medication for conditions such as pain

management, muscle spasms, and depression. Women report a greater interference of their regular activities (such as mobility and personal relationships) by secondary conditions than men. Women also spend more out-ofpocket on healthcare, are more likely to be supporting children, and are more likely to receive paid assistance than men.

Some other findings from the report on women with SCI include:

- Female respondents are more likely to be single than their male counterparts.
- Average household income is nearly the same for female and male respondents.
- A greater percentage of females than males perceive themselves to be overweight.
- Females are less likely to attend rehabilitation than males.
- Male respondents are more likely to have high blood pressure, while female respondents are more likely than males to have low blood presssure, heart disease, heart attack and high cholesterol.

- Just over a third of female respondents report using tobacco products on a regular basis, while over half of male respondents use tobacco.
- A higher percentage of females than males state that they have experienced depression in the last year.
- Nearly twice the proportion of male respondents report alcohol use than female respondents.
- A lower proportion of females than males report being a victim of crime. However, females are more likely to be sexually abused, while males are more likely to be victims of theft or assault-and-battery.
- Twenty percent of female respondents have given birth since injury.

In addition to the report to the CDC, several presentations have been made on the findings. Currently, two articles are being prepared to be submitted for journal publication. These articles will be useful for health care providers and Case Managers in better serving their clients.

Baby Choo-Choo Train

Shannon Smith of Mountain View, born with Spina Bifida, requested help from her Case Manager Charles Crowson with devising a carrier to hold her three month old daughter and allow her to propel her manual wheelchair (see Spinal Courier, April 1995). Charles designed and built a baby carrier to attach to the front of Shannon's wheelchair, which worked great - until Shannon had her second child this past summer. Shannon, then, found herself needing a way to keep up with her active two year old daughter and take care of the baby, too.

She once again asked Charles to help her with the problem. This time Charles made a hitch that could be quickly fastened to the rear of Shannon's wheelchair and to the front of the two year old's stroller. Now Shannon puts her new baby in the front carrier and her toddler in the stroller and away they go! This "baby choo-choo train" has proved to be the perfect way for Shannon and her two children to get out and enjoy the sunshine and even make a few trips to their favorite nearby fast food restaurant.



The baby carrier and hitch can be customized to fit any wheelchair. If you have similar needs and would like additional information on constructing your own, contact ASCC Case Manager Charles Crowson at 501-793-4153.

ElderChoices

Are you age 65 or older and would you prefer to remain in your own home with some assistance? If so,



ElderChoices may be the answer. ElderChoices is a state program sponsored by the Division of Aging and Adult Services. The purpose of the program is to prevent the institutionalization of individuals by providing services that will enable them to remain in their homes. Available services include:

- Homemaker Services
- Chore Services
- Home Delivered Meals
- Personal Emergency Response System
- Adult Day Health Care
- Adult Foster Care
- Respite Care
- Adult Day Care

ElderChoices is designed to meet some of the home care needs of persons age 65 and older who would meet the classification of Intermediate Level of Care, if in an institution. The gross income for a family of one can not exceed \$1,400 per month. There are some resource limits and the average cost of services provided must be less than the cost of services incurred if that person was in an institution. Also, it must be verified that the person is a citizen of the United States or a legal alien and a resident of Arkansas.

Many older persons with spinal cord disabilities receive high quality services through the ElderChoices program. For more information, contact your local Department of Human Services office or ASCC Case Manager.

Secondary Conditions Survey Results

Continued from page 1

Spinal Cord Injuries, has been completed. The results of this report will be used to develop better services to deal with the issues such as aging and other changes that come with living with SCI.

Some of the findings from the survey include:

- The average respondent experienced five to seven secondary conditions. The most common conditions mentioned were: change in sexual functioning, spasticity, depression and chronic pain.
- Forty percent experienced limitations in range of motion.
- Twenty-one percent reported having fractured a leg since their injury; five percent had fractured an arm.
- Twenty-one percent of those interviewed had a pressure sore at the time of the interview; 37 percent had one in the last year.
- Fifty percent had a urinary tract infection (UTI) in the year prior

to the interview; drinking fluids is the most common urinary tract infection prevention method.

- Almost 84 percent reported muscle spasticity; prescribed medication is the treatment of choice for 62 percent.
- Sixty-two percent have chronic pain that interferes with daily activities, primarily activities of daily living and sleep.
- Fifty-nine percent stated they are satisfied with their lives. Almost 50 percent of the respondents either strongly or moderately agreed that that they have gotten the most important things they wanted in life. For those who moderately or strongly disagreed with the statement, "I am satisfied with my life," almost two-thirds were respondents with chronic pain.
- For over three-quarters of those interviewed, depression was not a problem or was a mild, infrequent problem.

- Ninety-one percent were out of bed at least five hours per day; 40 percent stated they were out of bed 11-15 hours on a typical day.
- Eighteen percent were employed either full time or part time.
- The three most common problems mentioned by respondents were financial concerns, pain and transportation issues.

The information gathered from this report will help "... rehabilitation and health care providers to promote the development of interventions and changes in treatment to decrease the number and severity of secondary conditions in individuals with spinal cord injury." Additional research is being done to discover patterns that exist in the effects of secondary conditions among individuals with SCI. ASCC appreciates the cooperation of those who took the time to answer the survey and the efforts of those who worked on this project.

New Items In The Education and Resource Center

The new *Take Control* program on CD-ROM is a multimedia guide to spinal cord injury and is now available in the Macintosh version only (the PC version is to follow at a later date). *Take Control*, *Volume 1* includes topics such as:

- Introduction to Spinal Cord Injury
- Anatomy and Physiology of Spinal Cord Injury
- Skin Care
- Range of Motion
- Nerves, Muscles and Bones

Take Control can be used as a tutor, as a learning game and as an encyclopedia on SCI. This full color, one hour and 50 minutes, entertaining and educational CD features peer guides and resource lists, plus it contains 26 interactive video segments, 35 printable documents and a multimedia glossary. You can order your own personal copy through ASCC at a price of \$55, which includes shipping and handling. Anyone interested in seeing a demonstration of the CD is invited to stop by the Education and Resource Center and browse through it.

A new fact sheet is now available: #27 - Vibrator Technique for Ejaculation: One Person's Experience. To obtain your free copy of this fact sheet, or any of the other 26 fact sheets, please contact Karen Schmidt at (501) 296-1792 or (800) 459-1517, Monday - Friday, 8:00 a.m. to 4:30 p.m.

Also, don't forget that if you missed the annual ASCC conference on June 1, 1996, the Education and Resource Center has videotapes of all the conference sessions available to be checked out. Any one interested in these videos should come by or call the Resource Center.

Calendar of Upcoming Events

ADSA Fall Hunts

Outdoor events sponsored by Arkansas Disabled Sportsmen Association (ADSA) this fall include:

- Crossbow/Archery Hunts: There will be two hunts in Des Arc, AR at the ADSA Center during the first two weeks of archery season. Also there will be a one day bow hunt in Scott, AR.
- Modern Gun Season Hunts:

Shot Gun Hunt at Des Arc, AR for six persons at the ADSA Center.

Jackson Point - (*Doe Only Hunt*) for ten persons.

Stephens' Property - (*Doe Only Hunt*) for eight persons.

Corps of Engineers' Hunt in Russellville (*Buck and Doe Hunt*) for ten persons.

• **Duck Hunts**: There will be two duck hunts in December and January for four persons each at the ADSA Center in Des Arc. AR.

You are encouraged to sign up early for these trips. For more information regarding dates, lodging, etc. and to make reservations, call Joyce at **501-666-2523**.

To have activities announced in the January '97 issue of Spinal Courier call the co-editors at 501-296-1784 by 12/20/96.

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Commission Members:
Sheila Galbraith Bronfman - Little Rock
Grover Evans - Little Rock
Sloan Lessley - Calico Rock
Russell Patton - Jonesboro
Sandra Turner - Little Rock

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